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ABSTRACT

Based on data gathered from June 1982 to June 1983 from four urban elementary schools in the northeastern United States, this paper explores both the potential impact of organizational factors on teachers' felt-stress and the potential of strategies aimed at alleviating such stress. The schools functioned respectively as a control site, an individually based intervention site (involving 23 teachers), an organizationally based intervention site (involving 28 teachers and administrators), and a combined intervention site (involving 8 teachers). Teachers' perception of job stress was tested by pre- and post-test instruments; there were 203 responses. Results are reported in three sections: extent of teacher stress, impact of organizationally based stressors, and individual manifestations of stress. Four conclusions are reached: teachers' felt-stress was less than anticipated; teachers' identification of most and least stressful issues was consistent; teachers found classroom issues more stressful than organizational issues; and different stress management intervention strategies led to different results. Recommendations include a need for more classroom materials and equipment and uniform and effective discipline codes. Five tables and three figures include information on school sites, teachers' perceptions of stress on the job, and highest and lowest stressors. (PB)

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EFFECTS OF ORGANIZATIONALLY-BASED AND INDIVIDUALLY-BASED STRESS MANAGEMENT EFFORTS IN ELEMENTARY SCHOOL SETTINGS

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Teaching and educational administration are often characterized as high stress occupations. Teachers are viewed as stressed by the effects of violence and discipline problems among their students, decreasing job security, and increasing expectations that they rectify a host of society's problems (Sparks, 1979). Administrators, in turn, must cope with growing and diverse demands from teachers, their own superiors and the community they serve. Both groups often feel overwhelmed by paper work and other time consuming tasks. The too frequent end result is that many talented men and women with high expectations of achievement are dispirited and disillusioned. Some leave the profession while others stay but are plagued by a multitude of physical, psychological and behavioral stress-related manifestations (Walsh, 1979 and Needle, et al., 1981).

Too often we observe specific manifestations of stress, such as physical exhaustion, over-eating, drug or alcoholic abuse, mental fatigue

and excessive absenteeism, and conclude that remediation should focus on self-improvement of those exhibiting such manifestations. That is, with concerted efforts in areas such as improved eating habits, more sleep and physical conditioning, individuals will become emotionally and physically healthier which, in turn, will improve their ability to cope with stress.

While this view makes sense, it is only partially correct. It does not account for the environment which can contribute to an individual's felt-stress. One major environment for working adults is the organization in which we earn our livelihood. Cooper and Marshall (1978), Chernis (1980) and Ivancevich and Matteson (1980), have explored these work environments in an attempt to isolate categories of organizationally-based stressors that can affect employees' efficiency, effectiveness and satisfaction. The actual stress felt by organizational members is, ultimately, an outcome of the combination of the press of the organizational environment and the stress resistent capacities of the individuals who are employed in the organization.

This paper will explore the potential impact of organizational factors on teachers' felt-stress as well as the potential of strategies aimed at alleviating that stress. Specifically, it will identify organizationally-based stressors and isolate those which elementary school teachers in an urban school district report as most stressful. It will also explore the extent of stress these teachers feel and the ways in which they manifest their felt-stress. Finally, it will explore the effects of different stress management intervention strategies on these teachers' perceptions of the

intensity of organizationally-based stressors.

Some Definitions: Sources of Organizationally-Based Stress and Ways They are Manifested

As defined by McGrath (1970) stress occurs when there is "a perceived excess of environmental demands over an individual's perceived capability to meet them and when failure to meet these demands has important perceived consequences." Thus, it is a combination of the extent to which the environment is viewed as stressful, the desire of the individual to respond and the belief that he or she is capable of coping with that environment.

A number of researchers have attempted to isolate categories of organizationally-based stressors (cf., Chernis, 1980; Cooper and Marshall, 1978; French and Caplan, 1972; Frew, 1977; Ivancevich and Matteson, 1980). From these we have extrapolated five that are examined in the study:

Relationships at Work: The extent and tenor of adult interactions on the job. Included are interactions with superiors, peers and subordinates. There is a direct relationship between the extent of trust demonstrated in the relationships among organizational members and their feelings of job-satisfaction and well-being.

Organizational Structure and Climate: Stress-related issues in this category include the extent to which there is members' participation in decision making; whether members have a sense of belonging; whether supervision is supportive and effective; whether there is clear and sufficient communications; and the extent to which limitations are placed on the behavior of organizational members.

Factors Intrinsic to the Job: Every occupation has built-in working conditions. These include the extent, type, and pace of work; the physical effort required; the total number of hours involved and the specific hours of the day or night spent at the work place; the extent to which activities are regularized and repetitive; and physical environment factors, such as space, lighting, noise levels, and availability of private space.

Role in the Organization: Several role-related factors can be stress-inducing: role ambiguity (i.e., confusion about the scope or specific responsibilities of the job); role conflict (i.e., being pulled in

different directions by incompatible demands); roles which are high in responsibility for people; and the perception that there is a minimal sense of authority in one's organizational role.

Career Development: Career progression, including status, and opportunity for advancement is important to organizational members. Lack of job security and perception of low probability of reward can lead to manifestations of stress.

Individuals who are not able to cope satisfactorily with environmental stressors soon begin to show manifestations of stress. Depending upon the nature of the stressors and the make-up of the individual, manifestations may emerge as follows:

Emotional Manifestations: Stressful events can lead to an undesirable emotional or feeling state. Used strictly in the negative sense intended here, such feelings may vary from undefined anxiety, dissatisfaction and depression to reactions of fear and frustration.

Behavioral Manifestations: Humans respond to arousal, either consciously or unconsciously, in order to cope with their environment. Most such behaviors are considered quite normal, but in extreme cases stress can lead to such behaviors as chronic over-eating or an inability to sleep restfully.

Physical Manifestations: Chronic stress arousal and subsequent behavioral responses can result in overt physical changes. For example, constant muscular tension and elevated metabolic rates result in depleted energy reserves and, ultimately, a feeling of fatigue.

Methods

Setting

The setting for the study is a large urban school system in the northeastern part of the United States. It serves almost 48,000 students, more than 53 percent of whom are minority group members. The district employs 3,400 teachers and contains fifty K-8 elementary schools as well as fifteen middle and high schools and twenty-two special schools (e.g., academies, handicapped, bilingual).

The Sample

Four elementary schools were selected to participate in a year-long stress management project (June, 1982-June, 1983). After agreement was reached with the district's administration and teachers' association, all elementary principals were invited to an informational session about the project. Nine principals offered their schools as action-research sites. The final four sites were based upon compatibility of the demographic variables of enrollment, racial composition, and years of principals' experience in the building (see Table I) as well as the teachers' willingness to participate in the data gathering and, potentially, the intervention aspects of the project. The four schools were randomly assigned as control site, organizationally-based intervention site, individually-based intervention site, and combined intervention site--i.e., the site receiving both forms of intervention.

Table I

Descriptive Analysis of the Four School Sites Included in the Research

Category	Schools			
	Control Site	Individually-Based Intervention Site	Organizationally Based Intervention Site	Combined Intervention Site
Student Population	530	840	560	470
Full-Time Faculty	25	33	30	30
Percentage Minority Students	60	60	58	52
School Type	K-8	K-8	K-8	K-8
Administrative Structure	Traditional	Traditional	Traditional	Traditional
Principals' Years of Experience in the School	10	12	10	10
Socio-Economic Distribution of Students	Lower	Mixed	Lower	Lower/ Lower Middle
School Attendance Boundaries	Neighborhood/ City Wide	City Wide	Neighborhood	Neighborhood/ City Wide

Intervention Strategies

The action-research approach allowed the researchers to test for control-experimental site differences as well as differences in the extent and form of results of the several intervention strategies employed at the experimental sites.

The treatment received at the four participating schools is as follows:

1. Control Site. Faculty members completed pre and post tests but did not take part in the intervention part of the project, nor did they receive any feedback as to data results prior to the end of intervention.
2. Individual Intervention Site. The individually-based intervention consisted of a three phased program of awareness, instruction, and activation. Phase one included an informational session and biomedical evaluation measures--blood pressure, serum cholesterol, weight, and behavioral inventories. A Computerized personal health profile with a statistical life expectancy, and interpretation of results was developed for each participant. Phase two consisted of nutrition, relaxation and exercise workshops. Subjects voluntarily signed up for one or two workshops, depending upon their personal health profile results and individual interests. Phase three focused on individualized maintenance and self-management strategies supported by faculty committees providing both collegial support and recommendations for work site health enhancement modifications. Of the thirty-three teachers at the individual intervention site, twenty-three volunteered to participate in the project. Ten enrolled in the nutrition workshops, five in the relaxation workshops and eight in the exercise workshops.

3. Organizational Intervention Site. The organizationally-based intervention consisted of a three phased program of awareness, design, and intervention. Awareness consisted of teacher and administrator involvement in the clarification of specific stress-related issues at the school site, with the pre-test results being the vehicle for this effort. Design consisted of establishing specific goals to accomplish given ends. This was done cooperatively to enhance a sense of teacher and administrator "ownership" of the project. The final phase focused on the development and implementation of intervention strategies to alleviate, or at least modify, specific school-based concerns. Possible changes in structures, processes and behaviors were all explored in this phase of the project.

Twenty-eight of the thirty staff members at the organizational intervention site volunteered to participate in the project. Teachers and administrators worked cooperatively at problem identifying and priority setting and participated in various small and large group workshops to implement problem resolution strategies. Problems of central interest to the staff focused on such issues as increasing student motivation for learning, better management of discipline problems, and improving teacher-administrator relations.

4. Combined Intervention Site. Both individually and organizationally-based strategies were implemented at this school site. Only ten of the school's thirty teachers chose to participate in the project. Of

that number, only eight participated in both the organizational and individual intervention activities. This presented a severe limitation for the probability of positive effects. That is, the potential for school-wide impact was minimized because two-thirds of the staff were not involved in the project.

Pre and Post-Test Instruments

The instrument employed, "Stress in Schools," is a two-part Likert scale which contains eight demographic items, thirty-five organizationally-based stressor items (Section I), and twenty individual health manifestation items (Section II). Section I is an adaptation of an instrument used by Ivancevich and Matteson (1980). Section II was taken from an instrument developed by Fimian (1982). Both instruments have demonstrated acceptable levels of reliability and validity.

Data Collection and Analysis

The instrument was administered to teachers at the four participating schools at a period considered to be most stressful in schools, i.e., during June of 1982, and again during June of 1983. During the pre-test one hundred and thirty (97%) of the potential one hundred thirty-four teachers responded to the instrument. During the post-test seventy-three (54%) teachers completed the instrument. Responses for the post-test were almost totally limited to those who had exhibited continued interest and involvement in the action-research or intervention, partly explaining the declining response rate.

Data were processed and analyzed as follows. For both the pre-test

and the post-test means and standard deviations were calculated to identify and rank-order specific stressors and personal manifestations. The survey data was then collapsed into the categories of like constructs identified by Ivancevich and Matteson and collective means for each category were obtained. A second collapsing of data, this time by the organizational elements identified in the definitions section of this paper, was then undertaken. An ANOVA test was performed by categories to contrast the compatability of all four sites.

Given the small number of cases involved in this action research project, testing for statistical significance is not practical. Rather, results will be reported by means to identify trends and develop conclusions which can later be tested with larger samples.

Results

The results of the year-long stress management intervention effort are reported in three sections: extent of teacher stress; impact of organizationally-based stressors; and individual manifestations of stress. These results sections will be followed by a summary and conclusions, and an examination of implications.

Extent of Teacher Stress

Participants were asked to indicate the extent of stress they experience in their jobs. The pre- and post-intervention responses to this question are reported in Table II.

Table II

Teachers' Perceptions of Stress on the Job

Site	Pre-test Mean* (June, 1982)	Post-test Mean (June, 1983)
Control Site	3.58	3.38
Individual Intervention Site	3.23	3.33
Organizational Intervention Site	3.20	2.92
Combined Intervention Site	3.63	3.07
Total Group	3.35	3.15

*Scoring was on a five point scale, ranging from "very little" (1) to "very much" (5).

The overall mean pre and post-test scores, which are just above the mid-point on the scale, indicate that these urban elementary teachers feel the impact of stress, but not nearly as extensively as if often reported in anecdotally-based articles in the educational literature (cf. Grossnickle, 1980; Moe, 1979; and Sylwester, 1977). Post-test results show teachers perceiving marginally-less stress, but even these results are not clearly attributable to the intervention effort, because teachers at the control site showed a reduction in perception of stress, while teachers at the individually-based intervention site actually registered

an increased perception of job-related stress.

Impact of Organizationally-Based Issues as Stressors for Teachers

There was a remarkably high over-time consistency of organizationally-based stressors that teachers reported to be most and least stressful. Figure I, which reports organizationally-based issues that were most stressful for teachers, depicts teachers as most distressed about classroom related issues; i.e., stress is perceived to exist when there are hindrances to performing the teaching function. Equally important nine of the ten highest stressors reported in 1982 also appeared among the ten highest stressors in 1983. Finally, there is support for the conclusion that the project had a positive effect. The mean for the ten highest stressors dropped from 3.90 in June of 1982 to 3.64 in June of 1983.

There was also consistency over time for those items reported as least stressful. As indicated in Figure II, eight of the ten lowest stressors in 1982 reappeared at the bottom of the list in 1983. The mean for these items, issues which were not focused on in the intervention stage, was 2.07 in 1982 and 2.03 in 1983. Whereas the highest stressors focus on the classroom, the lowest stressors have to do with organizational expectations and role clarity. Clearly teachers are experiencing more stress from teaching function issues than from organization-wide issues. Finally, it should be noted that these teachers did not perceive themselves as being under-utilized; a phenomenon often referred to as "rust-out." The lowest ranked items on the instrument were "rust-out" issues.

When individual survey items were combined into the stressor categories

FIGURE I

TEN HIGHEST STRESSORS: JUNE, 1982 AND JUNE, 1983
IN THE THREE EXPERIMENTAL SITES

1982 Test Means (Overall=3.90)	1983 Test Means (Overall=3.64)
1. The materials, equipment and facilities to do my job are insufficient. (4.61)	1. My students would probably do better if they only tried harder. (4.25)
2. My students would probably do better if they only tried harder. (4.48)	2. The materials, equipment, and facilities to do my job are insufficient. (4.01)
3. The salary I receive is inadequate for what I do. (4.24)	3. I feel frustrated because of discipline problems in my classroom. (3.84)
4. I have responsibility for the future of students. (3.86)	4. I would like to be more patient with my students. (3.70)
5. I would like to be more patient with my students. (3.81)	5. I have responsibility for the future of students. (3.59)
6. I have to take work home in the evenings or on weekends to stay caught up. (3.75)	6. Parents do not recognize or appreciate how hard I work at this job. (3.51)
7. I feel that I just don't have time to take a break. (3.70)	7. I have to take work homein the evenings or on weekends to stay caught up. (3.49)
8. I feel frustrated because of discipline problems in my classroom. (3.65)	8. The salary I receive is inadequate for what I do. (3.47)
9. Parents do not recognize or appreciate how hard I work. (3.50)	9. My students do not recognize or appreciate how hard I work at this job. (3.35)
10. I do not feel that I am fully utilizing my abilities or potentials. (3.36)	10. I feel that I just don't have time to take an occasional break. (3.20)

*Mean scores are based on a scale ranging from 1 (never) to 7 (always).

FIGURE II

TEN LOWEST STRESSORS: JUNE, 1982 AND JUNE, 1983
IN THE THREE EXPERIMENTAL SITES

1982 Test Means (Overall=2.10)	1983 Test Means (Overall=2.04)
1. My fellow teachers do not provide help with my teaching problems when I need it. (2.48)	1. The school board does not recognize or appreciate how hard I work at this job. (2.48)
2. I am not able to control the activities in my work area. (2.43)	2. I am not able to control the activities in my work area. (2.28)
3. I am hurting my career progress by staying with this organization. (2.36)	3. This school has too much red tape. (2.24)
4. My job does not provide adequate opportunities for me to be creative. (2.23)	4. I am hurting my career progress by staying with this organization. (2.16)
5. My job duties and work objectives are unclear to me. (2.11)	5. I could do my job in a shorter period of time than I am required to be in the school. (2.15)
6. The organization expects more of me than my skills and/or abilities provide. (2.08)	6. I do not fully understand what is expected of me. (2.01)
7. I do not fully understand what is expected of me. (2.04)	7. My job does not provide adequate opportunities for me to be creative (1.99)
8. My assigned tasks are sometimes too difficult and/or complex. (1.99)	8. My assigned tasks are sometimes too difficult and/or complex. (1.91)
9. I could do my job in a shorter period of time than I am required to be in the school. (1.85)	9. The organization expects more of me than my skills and/or abilities provide. (1.87)
10. There is not enough to do in my job to keep me sufficiently busy. (1.43)	10. There is not enough to do in my job to keep me sufficiently busy (1.33)

*Mean scores are based on a scale from 1 (never) to 7 (always).

defined in the initial section of the paper, some interesting patterns emerged (see Table III). Career development issues, although positively affected, remain most stressful as a category over time. Organizational structure and climate shows most positive impact and slips from second to fourth place as an issue while role in the organization remains stable as a stressor but moves from fifth to third place. The persistency of career development as an issue is at least partially explained by the unchanged salary situation; a situation that was obviously beyond the ability of the intervention to impact. On the other hand, organizational structure and climate was of direct concern in two of the intervention sites, where it dropped as a stressor by .5 and .8, respectively. The role in organization category went up in rank, as noted, because of the real decline in the higher ranked categories. The low ranking given by respondents to role-related stressors is important to note. Kahn, et al. (1964) found that occupations with high levels of stress were those in which there were major role ambiguities and lack of clarity about role responsibility/authority relationships. Such issues were not perceived as most stressful by the teachers in the study.

When organizational issues are examined by individual site, varied patterns that parallel the intent of the action research design become apparent. The control site, as anticipated, remained relatively constant for all categories (the greatest variance being about .2 for relationships, and that was towards increasing stress). The individual intervention site,

TABLE III
Organizationally-Based Stressor Categories:
June, 1982 & June, 1983

Category	Total Group		Control Site		Individual Intervention Site		Organization Intervention Site		Combined Intervention Site	
	Mean* June 1982	Mean June 1983	Mean June 1982	Mean June 1983	Mean June 1982	Mean June 1983	Mean June 1982	Mean June 1983	Mean June 1982	Mean June 1983
Career Development	3.08	2.84	3.15	3.00	3.01	2.68	2.96	2.38	3.33	3.64
Organizational Structure and Climate	3.00	2.61	3.08	2.95	2.79	2.44	3.10	2.62	3.22	2.39
Relationships at Work	2.99	2.81	2.56	2.75	3.10	3.30	3.99	2.65	3.08	2.50
Factors Intrinsic to the Job	2.86	2.56	2.65	2.53	2.81	2.58	2.81	2.43	3.20	2.79
Role in the Organization	2.77	2.80	2.74	2.71	2.80	3.08	2.74	2.50	2.79	2.99

*Mean scores are based on a scale ranging from Never (1) to Always (7) stressful.

with no organizational intervention strategies involved, showed no clear pattern, pre to post. That is although the individually-focused workshops may have helped teachers to cope with their stress manifestations, they did not have any noticeable impact on perceptions about environmental stressors. The combined intervention site showed major improvement in three of the categories, but actually evidenced increased stress in two others. The organizational intervention site showed improvement in all five organizational-stressor categories. As noted earlier, participation at this school was almost total, while involvement at the combined site was limited to ten teachers. The variations in extent of staff involvement may have affected the differential impacts noted at these two sites.

- Individual Manifestations of Stress

Table IV describes the mean score results for the categories of emotional, physical and behavioral manifestations by sites and as a total group. As indicated these categories maintained their rank order from pre to post-test, and showed a clear trend to decrease over time. The greatest changes overall in the experimental sites were consistently made in the emotional category, which also included a modest decrease by the control site. As expected the individual intervention site demonstrated the greatest change on this dimension. This trend was not maintained on the other categories, however, as the combined intervention site consistently demonstrated the greatest change in the behavioral and physical categories. It should be remembered, however, that participation at the combined intervention site

TABLE IV
Stress Manifestation Categories
June, 1982 & June, 1983

Category	Total Group		Control Site		Individual Intervention Site		Organization Intervention Site		Combined Intervention Site	
	Mean* June 1982	Mean June 1983	Mean June 1982	Mean June 1983	Mean June 1982	Mean June 1983	Mean June 1982	Mean June 1983	Mean June 1982	Mean June 1983
Emotional Manifestations	2.75	2.35	2.61	2.48	2.93	2.10	2.51	2.25	3.10	2.71
Physical Manifestations	2.45	2.21	2.42	2.29	2.53	2.35	2.25	2.00	2.73	2.28
Behavioral Manifestations	2.05	1.84	1.99	1.77	2.02	1.86	1.98	1.81	2.28	1.92

*Mean scores are based on a scale ranging from not noticeable (1) to extremely noticeable (5) as a stressor.

was limited to eight participants so the results at that school may not be as representative as they are at the other intervention sites.

A logical pattern of program effectiveness emerges from a reading of Table IV. That is, the least percentage changes generally occurred at the control site, a slightly greater percentage change occurred at the organizational intervention, and the greatest changes at the sites where individual strategies were the focus of the intervention.

Table V presents data regarding the six highest individual variables, all of which scored above the scale midpoint (2.5). Though the results are not as consistently favorable as the general categories, a number of positive results are indicated. The two highest ranked items, "feeling anxious" and "feeling depressed," both of which are consistently reported as high stress manifestations among teacher groups (Cooper and Marshall, 1976; Warr and Wall, 1975; Needle, Griffin, Svendson, 1981) showed impressive decreases at the individual intervention site as compared to the control site. The remaining results are less clear, even though favorable tendencies occur because the control school lags behind the intervention sites. Specifically, the individual intervention site would be expected to show most improvement, but other than the first two items, this was not the case. For example, the organizational site showed the greatest decrease in "eating to excess" even though the individual intervention sites included diet intervention strategies. No logical explanations for this result is apparent.

TABLE V
Highest Ranked Stress Manifestation Items
June, 1982 & June, 1983

Category	Total Group		Control Site		Individual Intervention Site		Organization Intervention Site		Combined Intervention Site	
	Mean* June 1982	Mean June 1983	Mean June 1982	Mean June 1983	Mean June 1982	Mean June 1983	Mean June 1982	Mean June 1983	Mean June 1982	Mean June 1983
Feeling Anxious	3.24	2.97	3.07	3.33	3.71	2.82	2.89	2.90	3.33	2.85
Feeling Depressed	2.94	2.42	2.93	2.60	3.00	2.18	2.75	2.16	3.23	2.92
Experiencing Sleeping Difficulties	2.93	2.34	2.63	2.20	2.92	2.88	2.50	2.20	2.93	2.00
Eating to Excess	2.87	2.55	2.94	2.67	3.12	2.41	2.61	2.47	2.87	2.69
Physical Exhaustion	2.87	2.67	3.00	2.87	2.64	2.29	2.78	2.70	3.27	2.92
Easily Fatigued	2.68	2.25	2.81	2.40	2.52	2.18	2.54	1.95	3.07	2.62

*Mean scores are based on a score ranging from "not noticeable" (1) to "extremely noticeable" (5).

Summary and Conclusions

The learnings of the year-long stress management intervention project, as indicated by the variances in the pre and post-test results, point to several important conclusions. First, the level of felt-stress reported by teachers, although relatively intense, was lower than anticipated. There may be several reasons for this outcome. To begin, because most of the teacher stress literature base is anecdotal in nature and much of it has been written by, or at least reflects the feelings of, those who have experienced the greatest manifestations of job-related stress, our understandings may be skewed. In addition, where the literature actually does report stress based upon broad-based research, the outcomes are often reported as rankings rather than ratings. In any rank-ordering some items have to come out high in the order; thus we can be seduced into drawing inappropriate conclusions. What is required for more accurate conclusions are more studies with data, such as is found in the present study, that explores felt-stress on an absolute rating scale, not on a ranking system. It is also possible that the present study, which was limited to elementary teachers may not be representative of the extent of stress felt by secondary teachers who work in an organizational environment where stress is reputed to be more problematic. It may also simply be that teachers are better at coping with stress than we believe them to be or that they have operated under difficult conditions for so long that they have become numbed by the severity of those conditions.

Second, there is consistency of those issues that are related to

felt-stress over time. Teachers in the study were able to discriminate among the thirty-five organizationally-based stress items. That is, those items that were felt to be most stressful and those that were felt to be least stressful in June of 1982 continued to be the most and least stressful items in June of 1983. This is true of individual stress items on the instrument (nine of the top ten and eight of the lowest ten items in June of 1982 also appeared as the top and bottom ten stressors in June of 1983) as well as of overall categories of stressors. In short, what is felt to be stressful is not idiosincratic to individual educators or even to individual schools.

Third, what is most stressful to teachers is classroom-based as opposed to organizational-wide. Responding teachers were much more concerned about the learning, or lack of it, going on in their classrooms than they were about organizational issues. High on their list of stressors were classroom-related concerns such as insufficient materials and supplies, discipline problems, lack of student effort and having responsibility for their students' futures. Low on their list were such matters as teachers' relationships and organizational expectations for performance. In other words, they felt that their adult interactions were sufficient and they knew what their roles were. Equally important, they sensed that relevant others saw their roles as they did. The issue was more, could they fulfill those expectations, given the classroom conditions in which they work. These findings are supported by other recent studies in education (e.g., Goodlad, 1984; Fimian and Crane, 1982; Cichon and Koff, 1980; Schwab, 1982 and Schwab and Iwanicki, 1982).

Fourth, results of the action research support the belief that different stress management intervention strategies can lead to different results. However, extenuating circumstances, including the number of teachers participating at any specific school site and the support given by the school's principal, tend to modify the potential impact of any intervention. In the present case the ability to modify stressors ranked high on the part of teachers on the pre-test differed across the three sites, partly on the basis of intervention type and partly on the basis of the extent of local-site participation. (See Figure III).

FIGURE III

HIGHEST STRESSOR ISSUES

Issue Area	Did Improvement Occur?		
	Individual Intervention Site	Organizational Intervention Site	Combined Intervention Site
Career Issues	Yes	Yes	No
Student Issues	No	Yes	No
Responsibilities	No	Yes	No
Materials and Supplies	No	Yes	Yes

As expected, although participation at the individual intervention site was high, only one organizational/classroom stressor-related issue was positively affected. That is, as anticipated, while the intervention

may have improved teachers' abilities to cope and reduced their stress manifestations, it did little to alter their perceptions of the negative effects of organizationally-based stressors. The site receiving the organizationally-based intervention did appear to show significant improvement on all four of the high stressor issues. Participation at this site, as at the individual intervention site, was almost total for the school staff. The difference was only in the intervention strategy. The outcomes were as anticipated.

However, at the combined intervention site there was little positive movement on organizational/classroom stressors. In this case the lack of impact appears to be related mainly to lack of local site involvement. Only a third of that school's teachers participated in the project and the principal, perhaps justifiably, frequently stated her feelings that the school did not require the intervention.

Implications

The belief that the work environment is a causative factor contributing to teachers' stress and should, therefore, be included as a target for solution of teachers' stress, held up in this action research effort. However, as noted, this principle can be significantly constrained if local conditions such as those described for the combined intervention site exist. In general, the conclusions derived support the notion that individually-based interventions aimed at relieving teacher stress will not have lasting and organization-wide effects because they focus exclusively on stress manifestations.

Lortie's (1975) research indicates that teachers do not have much sense of appreciation or support for the difficult work they do. The present research supports this conclusion. A common theme emerged from the many discussions held with teachers in the experimental schools: i.e., they felt that administrators, the school board, parents and students did not appreciate their efforts or understand the complexity of their jobs. As a result of their research in New York and Illinois school districts, Sergiovani and Carver (1973, p. 59), found that "esteem seems to be the level of need operation showing the greatest deficiency for these professionals." This Rodney Dangerfield syndrome (i.e., "I don't get any respect around this place") can easily lead to a belief that "I don't deserve to get any respect." This self-deprecation, which was heard repeatedly from teachers in the study, has been echoed by other observers (e.g., Ames, 1982 and Cedoline, 1982).

Recognition of the difficult conditions under which many teachers operate would seem to be a logical first step towards improving the situation. Administrators are the major initiator of recognition activities. Assuming that they can get beyond preoccupation with their own stress, they must rally school boards, parents and students around supportive programs that provide teachers with a clear message of respect, encouragement and support.

Teachers will come to believe that there is esteem for their efforts when sufficient resources are provided and sufficient controls for task accomplishment are forthcoming. It is not the purpose or intent of this

paper to develop a list of "how to's" but the findings of the study, as well as those of others (e.g., Sparks, 1982) clearly point to the need for more classroom materials and equipment; opportunities to be involved in decision making regarding issues that directly affect teachers' ability to perform their duties; uniform and effective discipline codes; and reasonably demanding and varied tasks.

To begin requires only a first step. That in itself can do much to send the signal to teachers that there is concern. Before taking that first step, however, it should be fully realized that many more must follow. The typical "band-aid" strategies that are short-term and tend to focus only on "teacher heal thyself," will not suffice. Instead, expect that rallying the enthusiasm of dispirited teachers; gaining the support of school boards, parents and students; and working through the specific site-based issues will take time (perhaps years) and skill as well as good will. As difficult as this may appear, the option of doing nothing and the probability that things will only get worse is even less appealing!

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